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Original Communications.

PROFESSIONAL REMINISCENCES.

By J. L. CHANDLER, M.D., of St. Albans, Vt.

Read before the Vermont Medical Society, Oct. 15, 1874.

MR. PRESIDENT AND GENTLEMEN,—I am grateful for the courtesy so often extended to me, an antiquated member of your profession, where it always gives me pleasure to be tolerated. Participation in your discussions has become impracticable. I can merely *grope* in the twilight of age and infirmity, and must be satisfied to be an interested listener. I will only detain you from more profitable exercises but a short time with a few professional recollections.

More than half a century since, I always encountered at your meetings several of the venerable pioneers of the profession in Vermont, whose earnest bearing stimulated my young ambition to efforts for the attainment of all attainable knowledge in medicine, though the efforts suffered a terrible failure of success. Medical association, intercourse, fellowship, is not merely a recreation—a refreshment—but is indispensable for the attainment of a high grade of professional aptitude. The foundation for this must be laid in preliminary, scientific study, and medical colleges; but its completion can only be effected by kindly personal intercourse. I well remember, during the early stage of my medical pupillage, the discussion of plans for the formation of a Vermont State Medical Society, by such men as Ezekiel Porter, of Rutland, John Pomeroy, of Burlington, Benjamin Chandler, of St. Albans (my honored father), and their associates, and little did I think then—more than sixty years ago—of being here at this late date, to make honorable mention of its founders.

I became a member of this Society soon after its formation, and am prouder of the honor of having once been called to preside over its deliberations, than of any other distinction I ever attained.

That it has done all for the profession, or for the people, that might have been expected, may not be claimed; but that it has constituted one efficient element in improving and elevating the profession in Vermont during its existence, my own observations, for nearly sixty years, make it to myself very obvious. It is the germ from which many minor associations have emanated in the State, diffusing intelligence and genial elements through the profession that, forty years ago, were almost unknown, and hardly deemed attainable in the profession. "Doctors will disagree" had become a proverb.

To the younger members, professional association is absolutely a *sine quâ non*. Attrition of mind with mind, suggestion with inquiry, *ipse dixit* with demands for demonstration, are the methods by which

we keep off rust, and improve in our ready discriminations in the varying aspects of disease, and in our adaptations of remedies. And let me beg your forbearance, gentlemen, while I urge on the younger members of your Society the paramount importance of that department denominated diagnosis. Yet let them not be too much depressed if, in calling their seniors in consultation, they sometimes find themselves convicted of false diagnosis.

I have seen instances of the same blunder in reverend seniors (to say nothing of my own unnumbered mistakes). Many years since, an intelligent medical friend, residing in a distant part of the State, had a patient, a young lady, suffering from derangement of the assimilating functions, which, for a long time, had resisted all treatment for relief. An eminent member of the profession, a professor in more than one medical college, was called in consultation, who pronounced it a case of valvular disease of the heart, and hastily predicted that the patient, at the utmost, could not survive a year. My friend, the attending physician, yielded his own opinion, and the patient was given over to her doom. Having occasion, subsequently, to visit the place of my friend's residence, he courteously invited me to accompany him in a visit to this patient, without giving me any intimation of the facts as above related. I examined the patient as if I had been called in consultation, and gravely pronounced the case *anæmia*, from derangement of the digestive organs, and want of due assimilation, and thought she would probably recover, *inferring* that my medical friend's opinion was the same. He expressed his regret that I had given my opinion so hastily (which, I think, had surprised him), "especially in the hearing of the patient, lest it should excite false hopes." But no such result was likely to follow, for the beautiful patient exhibited strong resentment, that I should presume to question the capacity of the venerated Dr. Mussey to judge correctly of her case, and its final result, evidently assuming that I had been informed of Dr. Mussey's opinion. It is no more than just to the memory of that distinguished man (as the result will show) to say that this occurred only a few weeks after the first introduction of the *stethoscope* into the United States, and I think it not unlikely it may have been the first opportunity presented him for testing its reliability, as a means of detecting the seat and character of internal disease. Is it a wonderful thing that the most adroit man in the profession, even, should have failed of a true diagnosis, under like circumstances?

The young lady had the aspect, very obviously, of anæmic patients, had the delicate organization, which often characterizes females for a period before and after puberty, favoring the development of romantic absurdities. She evidently delighted in the idea of her own frailty, and enjoyed the admiration of her sympathizing friends. I had a clear recollection of my honored father's method, and management of such patients. I was permitted to reexamine the case, but could find no evidence of valvular disease, and, notwithstanding my sincere reverence for Dr. Mussey, I adhered to my own opinion, for which my medical friend evidently pitied me, and the beautiful patient hated me. She lived on, the same lovely, interesting, suffering invalid, one year, ten years, twenty years—became a maiden lady at last, and got *married*, and, a long time after, died, whether of valvular disease of the heart, I never learned.

To counterpoise the self-conceit which may have prompted the above story, and as penance for having made free with an oversight of Dr. Mussey, whose shoe-latchet I was unworthy to unloose, please bear with me, while I relate *one* of my own humiliating blunders.

In early professional life, I was called in consultation in a case of strangulated inguinal hernia—the attending physician, also, being young in experience—and found the scrotum enormously distended. All attempts at reduction had failed for some four days, and my own attempts to accomplish the feat were equally futile. I had never even *seen* the operation which is the *dernier ressort* in such cases, and my medical friend was equally at fault.

The patient was old and feeble, and evidently losing ground rapidly. We were at too great distance from any competent surgeon, who could arrive seasonably. We had but a misty recollection of the anatomical relations of the region, and lacked even a decent case of pocket instruments. My friend positively declined the attempt, and I must look on and see the patient die, or make the attempt myself. The distention of the scrotum was lessened one-half at the first incision, which was a rash one, considering that I knew little what I was about, and there was a sudden gush of serum, seemingly a pint, which proved, I suppose, that the vaginal coat of the testes was distended with fluid, thus complicating the case. I made a bloody business of it, and after much tumult succeeded in returning the intestine; and, though I noticed some dubious discolorations on its outer coat, I knew of no better expedient than to hide them in the abdomen. I had controlled the hemorrhage by ligating several arteries, most of which, I suspect, were needlessly severed, and was preparing to close and dress the wound, when I discovered a very dark spot on the investing membrane of the testis, perhaps three-fourths of an inch in diameter. Leaving the patient in the care of other attendants, I took my friend out of ear-shot and said to him, "Tell me, is that incipient mortification? It's a matter of life or death!" His reply was, "I don't know. Do as you think best, and I'll maintain you were right." I removed the testis, and the patient lived on, many years.

I've told you this prosy story, gentlemen, in part, also, for the purpose of introducing you to the late venerable Dr. Mott, of New York, who, you will perceive, failed to admire me, either for my adroitness in surgery, or for any discrimination in diagnosis. For several months I had been growing a little sensitive over the question whether it had been needful thus to maim the good old gentleman's manhood. It was my habit in those days to visit New York occasionally, and Dr. Delafield, having once before done me a professional kindness, repeated the favor by accompanying me to Dr. Mott's library, where we found him disengaged, and said he would leave me for half an hour in Dr. Mott's hands. I don't think I had ever seen a library before. I had felt some complacency in my own little collection of medical books, but could have stored them in a bushel basket. The dimensions of the room were some twenty by thirty feet, probably more on the floor, and the walls very high and, with the exception of needful spaces for doors and windows, entirely occupied with garnished shelves from bottom to top, and filled with books. The doctor was sitting in an easy-chair, by the side of a table, with a volume in his hand, which he courteously laid aside as we were ushered in; he exhibited a tidiness

and purity of costume and person which, I think, could not have been displayed by an ordinary man, without reminding us of the shallow-pated pigmies we sometimes encounter in the guise of birds of paradise. But on Dr. Mott, the easy grace of his bearing made it seem the mere outgrowth of his manhood, and he was obviously unconscious of his clothes. His dress consisted of neat but plain slippers, white silk stockings, light buff small clothes, festooned at the knee with small, plain gold buckles, light buff coat, white vest, and white satin stock on the neck. He wore a diamond ring on his finger, and as I grasped his soft hand in my own rough paw, I thought I felt the vibration of a shudder creeping through his entire frame. He was very courteous, and evidently strove to avoid any appearance of condescension towards me, though my own sensations reminded me of the country mouse, who visited the city lion. It was marvellous—the care with which he kept his claws retracted, as he took the mouse in hand for a little examination; and, really, one might have thought, to have heard him, that he sometimes found me a very clever mouse. So, I soon found myself at ease and at home, and quietly gave up the attempt to personate a lion.

After other matters of inquiry, in regard to medical men in Vermont, two or three of whom he spoke of in terms of interest and respect, he began to question me a little in regard to my own practice, and whether I was fond of surgery, and then startled me with the inquiry whether I had had much experience in strangulated hernia. I think I was not sorry, for I found myself in a mood to make a clean breast of it, and to tell him the whole unvarnished truth in regard to the case and the operation, without any covert contrivances for concealing my own awkwardness or ignorance.

He was very considerate—interrupted me with no inquiries or comments during the relation, but, in his appearance, reminded me of a patient in the hands of a dentist, without the alleviation of chloroform.

After I got through, he inquired—"and did he survive all this?" I replied, "He yet lives, and is a hearty, hale old man." With a sigh of relief, his only utterance was, "Fortunate!" "And now, doctor," said I, "will you do me the favor to tell me frankly whether I did right, under the circumstances, in removing the testis?" He looked at me for a minute, inquiringly, as if to consider whether I could bear the truth, and said, "Well, doctor, under the very peculiar circumstances (as much as to say, I suppose, as the patient was in the hands of a brace of green tyros, who did not know the difference between gangrene and simple ecchymosis), perhaps we might say you did right; but there was not the least occasion in the world to make a gelding of your unfortunate patient."

Perhaps a little restitution is due the gentler sex for portraying an instance of their sentimental nonsense, from which they may fancy we deem ourselves exempt. Let me give you a like specimen exhibited in verdant manhood, probably at about the same period of development. During my early pupilage, I was fast becoming a sentimental exquisite myself; reading myself well up in all the pathological abnormalities of the heart, till I honestly believed they had me in their clutches, and I had begun to admire myself as an interesting pathological specimen. On one occasion, after a late and hearty supper, I went early to bed, and, at midnight, the abnormalities had me fast. I

believed I could neither breathe, nor feel pulsation at the wrist. A boy was within call in another chamber, whom I sent in haste to my father below, with a message that I was dying. I felt a little mortified that he did not hurry up; but he came at last, with a lamp in his hand, and, looking me sternly in the face, said, "What now?" I looked up beseechingly, and faintly and meekly whispered, "My heart!" He paused a moment as if for devising an appropriate remedy, and then gave it, in no very gentle tones, saying, "My son, if you ever call me up again to see you die, I'll recuperate your heart with a horse-whip!" and left me to die alone, and I was greatly chagrined by failure to accomplish the feat.

Progress in Medicine.

REPORT ON OTOLOGY.

By J. ORNE GREEN, M.D.

Pneumatocoele Cranii, caused by Rupture of the Mastoid Cells.—Prof. Wernher, of Giessen (*Zeitschrift für Chirurgie*, vol. iii.), describes a case of pneumatocoele cranii from the spontaneous rupture of the cells of the mastoid process. The patient, a young woman, aged twenty, free from any disease of the ear, reported that, four years before, after violent sneezing, a tumor, as large as a pigeon's egg, unaccompanied by pain, appeared over the upper part of the mastoid process. At first, under pressure, it disappeared, but returned immediately with expiration; it gradually enlarged, and, at the time of examination, the right half of the scalp was taken up by an enormous swelling of three lobules, which extended beyond the vertex, and backwards to the occipital bone; at the most prominent points, the skin was raised two inches from the bone. The tumor was painless, the skin over it normal; the tone, on percussion, sonorous; but auscultation, under pressure, gave a blowing sound, and not emphysematous crepitus; from sneezing, or Valsalva's inflation, it increased slowly; under compression, it diminished slightly, and the patient felt as if air passed into the pharynx, and some difficulty of respiration was caused. A three-cornered opening could be felt in the bone of the mastoid, into which the end of the finger could be passed. The ear appeared normal, but the hearing was a little dull on that side.

An elastic bandage over the head emptied the air from the tumor, and was worn for twelve days, in the hope that adhesion of the skin to the bone would take place, but without success; a small portion of the tumor was then pressed between the fingers, and into this a small quantity of tincture of iodine was injected from a subcutaneous syringe; four similar injections were afterwards made in other parts of the tumor, and the adhesive inflammation, resulting from these, attached the skin firmly to the bone, and the patient was cured. Very slight local irritation followed the injections.

Wernher closes his article with a review of eleven cases of a similar disease, already described.

Traumatic Otorrhagia.—Dr. Le Bail, in a monograph on this subject, draws the following conclusions:—

1. That a discharge of blood from the ear, after an injury of the

head, is characteristic of no one disease, and is, in itself, absolutely, of no diagnostic value.

2. Such a discharge is common to several lesions of the ear, arising from different causes, viz.:—

a. Wounds of the external auditory canal, which frequently result from injury to the face or lower jaw; in these cases, the history of the injury, the condition of the inferior maxillary articulation, the condition of the membrana tympani and the tympanic cavity serve to guide the surgeon to an accurate diagnosis.

b. Injuries of the membrana tympani and the mucous membrane of the tympanum, which frequently accompany injuries of the head, and may be the result of either direct or indirect violence; in these cases, the progress of the symptoms enables us to decide on the seat of injury. An injury of the drum-membrane or tympanum does not cause the serious train of symptoms which a fracture of the petrous bone does.

c. Fractures of the petrous bone, in which the duration, intermittence and repetition of the bleeding are of great diagnostic value in distinguishing the injury from a simple laceration of the middle ear, for in the latter case the bleeding soon ceases, and does not return.

In connection with the subject of bleeding from the ear, the observations and conclusions of Hagen (*Praktische Beiträge zur Ohrenheilkunde*, 1866) on the pathognomonic value of serous discharge from the external ear, after injuries to the head, are of interest. The generally-received opinion that the serous discharge from the ear, after an injury to the head, always comes from the subarachnoidal cavity, and is, in fact, the cerebro-spinal fluid, and that, therefore, such a discharge is pathognomonic of a fracture of the base of the skull, he denies, from the fact that several cases have been reported, in which a very copious discharge of serous fluid from the ear, followed injury of the head, and yet *post-mortem* examination showed that no fracture of the petrous bone had taken place. One case showed, six years after the injury, no trace of a fracture of the skull, but only a cicatrix on the membrana tympani, dislocation of the ossicula and pseudo-membranes on the secondary foramen; in another case, in which, as the result of a fall on the pavement and a consequent blow on the side of the face, a watery discharge began immediately from the ear, and continued, at the rate of 7 to 12 grains per minute, for three days, perfect recovery followed; but three years afterwards an autopsy showed no fracture of the skull, and only an ununited fracture of the base of the stapes, so that the tympanum and the vestibule were in communication.

Hagen concludes that, although in general a serous discharge from the ear is the result of a fracture of the base of the skull, it is not necessarily so; that in cases in which bleeding and a serous discharge from the ear result from injury, the diagnosis must be doubtful, unless the chemical constituents of the secretion are different from those of the cerebro-spinal fluid; in that case, we can exclude a fracture of the petrous bone. He holds, with Prescott Hewett, that a serous discharge may be secreted from the mucous membrane of the tympanum without a fracture of the petrous bone.

A New Method of Removing Foreign Bodies from the Ear.—In addition to the methods of removing foreign bodies from the ear, already described, viz., the syringe, forceps, wire loop, hook, crushing instru-

ments, attachment of a thread to the foreign body by glue, shrivelling of the mass, when possible, by astringent instillations, Voltolini (*Monatschrift für Ohrenheilkunde*, No. 8) suggests burning the mass into fragments by means of the galvano-caustic, and narrates a case in which he was able to do this with perfect success. The patient had been ordered to use powdered alum in the ear to check an otorrhœa; some months afterwards, that ear was found to be filled with a hard, stony mass, which could not be removed by the forceps or syringe. By means of the galvano-caustic, however, Voltolini was enabled to reduce it to fragments, and thus to free the ear entirely. The possibility of this procedure is worth remembering in those cases which occasionally tax the ingenuity of the surgeon to the utmost.

(To be concluded.)

Reports of Medical Societies.

BOSTON SOCIETY FOR MEDICAL OBSERVATION. W. L. RICHARDSON, M.D., SEC.

Two Cases of Pneumonia, in which the Characteristic Symptoms of Cough and Expectoration were Absent.—Dr. S. W. LANGMAID reported the cases:—

CASE I.—Mr. B., 48 years old, a master builder, residing at south end of Boston, first visited July 6, 1872.

He says that, upon returning home yesterday afternoon, after a short drive into the country, he was seized with headache, and from being at first chilly became quickly feverish. The headache continued through the night. This morning, he vomited. Has now no nausea, but headache is constant. He reports the bowels rather constipated. He is in bed, lying on his back. Face somewhat flushed; skin hot; pulse 80. No eruption upon skin. Decided tenderness at pit of stomach. No cough, and no pain, except headache.

I supposed he was suffering from slight cold, with some digestive disorder.

Prescribed a purge of calomel and rhubarb.

The next day, Sunday, being spent out of town, I did not see him.

Monday, 8th.—Reports that the headache was relieved by the action of the cathartic, but that he still feels feverish, and much weaker than was to have been expected from so gentle a purge.

This weakness he thought might have been caused by a fracture of the radius, which had been more or less painful throughout its continuance, the splints having been removed three days before his present seizure. He has no cough nor pain, but feels very much like lying in bed. Skin somewhat warmer than usual. Pulse 78.

Is told to remain in bed. Some fever drops are to be taken whenever needed.

9th.—Reports as yesterday, almost no change. Still some feverishness. Pulse 80, not very full.

For the first time, *respiration* is noticed to be somewhat hurried (how rapid, I failed to record). No cough, no pain, no expectoration. This was the fourth day. He was still somewhat feverish. The pulse was more rapid, and the respiration hurried.

There was evidently something more here than mere bilious disorder.

Upon examining the chest in front, I found nothing abnormal, but the first percussion stroke on the right back showed the situation of the disease. Dulness on percussion. Bronchial respiration, and increased vocal fremitus over a space corresponding to the lower lobe of the lung, with here and there slight crepitant râle, made it perfectly clear that I had a case of pneumonia to deal with. But I had never seen a case in which the consolidation had taken place without cough and some pain.

I need not go on with the particulars of recovery; but will only say that, from the beginning to the end of it, there was never anything like pneumonic expectoration; indeed, there was much less than the normal amount of mucus expectorated, and that never colored.

July 19th.—Thirteen days from the commencement of the disease, the patient was about his room, and my visits were discontinued.

CASE II., April 29, 1874.—Mr. R., 64 years old, a teacher, residing in a neighboring State, complains of headache, nausea and feverish feeling. Had chill day before yesterday. Has slight pain in region of liver. Bowels much and habitually constipated. Has had hæmorrhoids for years, and three years ago received advice from me for a moderate enlargement of the prostate gland.

Had, while a student, some acute trouble in right lung, and has considered that lung "weaker" than the other ever since. Within two years, has had two attacks of moderate jaundice.

Previous to present attack, has considered himself in good health.

Present condition.—In bed, upon back. Very tall, and thin in flesh; evidently not a robust man. Speech and facial expression show nervous temperament.

The skin is not discolored, only a want of transparency noticed. Complains of dull feeling in region of liver, and there is tenderness at præcordia. No enlargement of liver made out. Percussion and auscultation reveal nothing abnormal. No cough. Pulse 82; its rapidity out of proportion to amount of febrile disturbance, but accounted for by his statement that it is always fast. No disease of heart found.

The case appears to me to be one of bilious derangement, such as he was likely to suffer from, and such as he had had before. I remarked to his wife that I should not be surprised if he became jaundiced. Prescribed farinaceous diet, and a pill, containing a quarter of a minim of croton oil, with small amounts of jalap and colocynth. He has been taking eight grains of quinine daily, and will continue to do so.

30th.—Condition much as yesterday. Pill operated freely twice; did not cause exhaustion. Was restless last night. Complains of headache, and heavy feeling in region of liver. Slight, transient pain darting from region of liver towards right clavicle. Pulse 82. Region of liver carefully ausculted. Thorax, also, front and back. Nothing abnormal found. Urine dark colored.

Was given a fever mixture, and was kept on farinaceous diet.

May 1st.—Was restless all night. Condition this morning about as yesterday, except that skin and conjunctivæ are decidedly yellow. Urine contains bile.

Four leeches to be applied to region of liver.

One aloes and myrrh pill ordered; to take eight grains of Dover's powder at night.

Saturday, May 2d.—The fourth of my visits. His condition at the

morning call was not changed. Has had no more pain or bad feeling in region of liver since the leeches were applied. The quinine is discontinued. Was asked to see him at night, as he seemed to have become weaker since morning. Found the pulse rapid and small, 110, occasionally intermitting. The quinine is resumed during the night.

3d.—This morning, the pulse is stronger and slower, although 90 to the minute.

Monday, May 4th.—Condition worse. The jaundice has deepened. He is weaker. Pulse 112. Temperature 100°2'. Was ordered beef-tea and champagne.

May 5th.—Consultation with Dr. Ellis. Patient's pulse very rapid, small, and intermitting every fourth or fifth beat. Respiration rapid. Patient was raised to sitting posture, and the first tap on the right back showed where the trouble was.

I think it right to say here that I had constantly in mind the liability to the complication of jaundice by pneumonia, and had, during the first two days, made careful examination of the thorax, and inquiries with respect to cough, and pain in the side. And, since the first case which has been related, I have never lost sight of the fact that pneumonia might exist without the presence of cough, pain or expectoration. In the absence of these, I must say that my attention was directed more especially to the region of the liver. It was found that at least two-thirds of the lung were involved. Concentrated beef-juice with milk punch were given, alternately, every half hour.

The next morning, the consolidation had extended to the upper portion of the lung. The patient's mind was confused. Temperature 101°2'. Pulse 120.

Thursday, 7th.—Crepitus was heard almost all over the back in places; and on Friday the crepitus was more general and the tubular breathing less decided. General condition better.

Convalescence was slow, and on the 29th of the month, thirty-one days from the date of my first visit, he was able to return to his home.

Crepitus was heard in isolated places up to within four days of his leaving town.

Had I time, and if it were consistent with the object of this report, I might enter more fully into the symptoms and treatment of these cases, particularly the last, which, contrary to the expectation of Dr. Ellis and myself, recovered. Enough has been said, however, to show that these were cases of pneumonia which went through the various stages of consolidation and resolution, with absorption of the material with which the lung was gorged, without pain, cough or any expectoration, which would call attention to the true seat of the malady, unless the occasional yellow sputum referred to below be considered pathognomonic.

In the last case, there was expectorated, once each day from the date of consultation, from one to three masses of extremely tenacious yellow matter, slightly discolored, but it was the patient's belief, and my own, that this came from the posterior nares and pharynx. Certainly, there was nothing like characteristic sputa.

I do not know but members of the Society have seen similar cases, but they are the only ones in my experience, and they have seemed worthy of being brought to your notice to-night.

Dr. Minor said he had seen several cases like those Dr. Langmaid

had reported, in which there was neither cough nor expectoration. He thought that pneumonia was frequently overlooked from this very absence of symptoms which pointed to the lungs.

Dr. STEDMAN agreed with Dr. Minot, and cited the case of an old man who had pneumonia of the right lung unaccompanied by any pulmonary symptoms.

Dr. KNIGHT alluded to the case of an old lady who had been admitted, several years ago, to the City Hospital, for rheumatism. A careful examination showed pneumonia of one or both lungs, the exact condition he had forgotten, yet there had been no cough or expectoration prior to her entrance to the hospital.

Dr. BOWDITCH had seen a case in which there was complete solidification of the lung, and yet during the whole progress of the disease but a single characteristic sputum was observed.

Dr. C. P. PUTNAM alluded to the fact that, in pneumonia of young children, there was rarely any cough.

Dr. REYNOLDS alluded to the case of an old gentleman who had died of double pneumonia, and yet there had been only a slight cough and one characteristic sputum.

Dr. J. G. BLAKE said that these cases were by no means rare at the Home for Aged Men.

STATISTICS OF SCHOOL CHILDREN.—The classification of school children, according to the color of the eyes, hair and skin, has been made in the various public and private schools of Nuremberg, with the following interesting results. Of 9,819 children examined, 34 per cent. were found to have blue eyes, 31 per cent. grey, and 35 per cent. brown. The color of the hair was blond in 61 per cent., brown in 45 per cent., and black in 4 per cent. The color of the skin was white in 83 per cent. and brown in 17 per cent. The different combinations are represented by the appended figures.

Eyes.	Hair.	Skin.	Total No.	Jews.
Blue,	Brown,	White,	882	40
"	Blond,	"	2,244	29
"	Brown,	Brown,	226	16
Grey,	Blond,	White,	1,645	12
"	Brown,	"	879	30
"	"	Brown,	316	6
"	Black,	"	97	11
Brown,	Blond,	White,	1,122	16
"	Brown,	"	1,532	100
"	"	Brown,	586	24
"	Black,	"	290	32

—Allgem. Med. Cent. Zeitung, Sept. 30, 1874.

A SUPPLEMENTARY SPLEEN.—An interesting case of farcy was admitted into the Charing Cross Hospital last week, which terminated fatally, from exhaustion, in a few days. Only one abscess in the left axilla required opening. The *post-mortem* revealed the following: The body was well nourished generally; a few pustules in the upper part of the thorax; both lungs in the first stage of pneumonia; on the right side there were old pleuritic adhesions; the heart sound was empty; the lining of the aorta was covered with atheromatous patches; liver normal, also the spleen, and, strange to say, there was a supplementary spleen, the size of a walnut; the kidneys were congested, especially the right, which was larger than left, and weighed considerably more; the lymphatic system was generally in a state of turgescence, but there was no appearance of pus in any of the joints or internal organs.—*Medical Press and Circular*.

Bibliographical Notices.

Pharmacographia. A History of the Principal Drugs of Vegetable Origin met with in Great Britain and British India. By FRIEDRICH A. FLUECKIGER, Ph.D., and DANIEL HANBURY, F.R.S. London: MacMillan & Co. 1874.

THE ground covered by this book is not precisely the same with any of the numerous works now in use upon materia medica and its allied branches. The authors say:—"It is, in fact, a record of personal researches on the principal drugs derived from the vegetable kingdom, together with such results of an important character as have been obtained by the numerous workers on materia medica in Europe and America." They leave out almost completely any direct reference to pharmacy proper; and therapeutics is merely touched, the chief use of each drug being mentioned, without any attempt to explain its action, except so far as a recognition of the actual or probable active principle may be thus considered. Although the book does not in the least supersede the use of works on chemistry and botany, and does not pretend to be an encyclopaedia, its information upon these points, as well as on history, production, commerce and adulterations, is very full; and, what is quite as much to the point, is undoubtedly, from the well-known reputation of its authors, accurate and reliable, informing us whence the drugs actually in use are derived, rather than, like some older works, indicating whence they might be, or used to be, obtained. Any more extended statement of the contents could hardly be of much value to any but those who will want the book itself, and they are all who are interested in drugs aside from their therapeutic uses. But one gets a realizing sense of the enormous territory covered by organic chemistry, over which no one man can possibly travel and observe all the details, by examining the analyses of some single drugs; opium alone gives us sixteen alkaloids, with many artificial derivatives, to say nothing of acids and other less defined substances. Five alkaloids have been derived from different varieties of cinchona, in addition to the four (or six) better known.

The style is clear and concise, and the work is one which in every respect attains the object for which it was intended. Much of the material is necessarily common property with other works on pharmacy. Ebn Baithar and Galen cannot be rejuvenated, and the characters of alkaloids and oils are not changed by the re-arrangement, into new genera, of the plants which furnish them, but we find, nevertheless, an air of freshness and novelty about the book which is wanting in the usual compilations, and it represents a much larger amount of original work than they, both in actual discovery and in revision.

Clinical Lectures on Diseases of the Nervous System. By WILLIAM A. HAMMOND, M.D., &c. Reported, edited, &c., with Notes, by T. M. B. CROSS, M.D. New York: D. Appleton & Co. 1874.

THIS volume, of 287 pages, is made up of a series of well-reported and interesting cases illustrative of many of the most important diseases of the nervous system, which, taken together with the remarks accompanying them, are well calculated to be of service, both to the students before whom the lectures were originally delivered, and to the general practitioner, the more so because the style of both writers is, in general, remarkably clear and pleasant.

The pathological anatomy of the various affections is entered into but little, an omission of some importance, although made in accordance with the plan of the work as stated in the preface; neither can it be said that the cases are critically discussed, as with the view of discovering new truths, but rather used to illustrate well-known types of disease.

The only further criticism we have to make is the one so often necessary,

that, even though it may be done to avoid creating confusion in the minds of hearers and readers, it is a mistake to refer to doubtful, or half, truths in terms which imply unqualified acceptance of them on the part of the writer.

Thus, repeated reference, without qualification, is made to the beneficial effect upon the circulation and nutrition of the brain, in cases of disease of that organ, of galvanization of the cervical sympathetic (pp. 7, 78, 208, 232), the cerebral vessels being made sometimes to dilate, sometimes to contract, in consequence of such treatment.

It could, however, hardly be denied that good observers are still at variance with each other as regards even the fact that benefit is ever to be obtained by this treatment, where the sympathetic nerve itself is not implicated in the disease.

Similar objections might be made to the statement (p. 162) that paralysis of the third cranial nerve in a case of locomotor ataxia should be referred to affection of the cilio-spinal centre of the spinal cord, and thereby of the sympathetic nerve.

Among the more particularly interesting parts of the work may be mentioned the chapter on convulsive (paroxysmal) tremor, an affection distinct from epilepsy, chorea and paralysis agitans, and first described by Dr. Hammond, in the *New York Medical Journal*, in 1867. But few cases have been observed, and its pathology is unknown.

A case of sclerosis of the posterior columns of the spinal cord is reported, in which the conduction of sensitive impressions was so much impaired that the astonishing interval of five minutes elapsed before the prick of a needle in the leg was felt.

A similar delay in the conduction of painful impressions in this disease has often been remarked, but no interval so great as this has, we think, been observed.

In cases of sciatica, Dr. Hammond has obtained excellent results from the deep injection of morphia (concentrated solution containing five grains to the ounce of water), even into the sheath of the nerve itself, which, after some experience, can be done, he says, with great accuracy, a thrilling sensation, running down the leg, being felt by the patient when the proper point has been reached. Sometimes a single, but oftener several, injections are necessary to complete the cure, and sometimes the relief is only temporary at best.

The popular prejudice against the continued use of ergot in large doses (a drachm of the fluid extract three times daily), is declared by Dr. Hammond to be entirely groundless, there being, in his opinion, no authentic case on record in which gangrene was thereby produced.

A useful and ingenious instrument for measuring the power of continuous muscular pressure with the hand is described, consisting of a dynamometer, to the index of which is attached a recording pen, which plays against a slide moved by clock-work, as in Marey's sphygmograph.

The absence of typographical errors and the excellence of the printing are very noticeable.

Nature Series. The Common Frog. By ST. GEORGE MIVART, F.R.S.
London: Macmillan & Co. 1874. Pp. 158.

THIS treatise, which has appeared piecemeal in *Nature*, is an excellent account of the natural history of the frog. It is not strictly an anatomical study. The physiologist will look in vain for much assistance in his researches. We may turn aside, for a moment, to regret that there is no thorough, dry, practical anatomy of the frog, in which the shape of the bones, the origin and insertion of the muscles, the distribution of vessels and nerves is given with the accuracy and absence of all embellishment with which they are treated in human anatomy. We do not forget the anatomy of the *rana pipiens*, by the late Prof. Wyman; nor that a work, such as we speak of, was commenced some years ago, in Germany, and ended prematurely with the skeleton; both of these are excellent, as far as they go, but a text-book on the subject is still a desideratum.

The present work has little to do with anatomical details, except inasmuch as they are of peculiar significance in showing the zoological position and relationship of the animal. It is a very favorable specimen of what is known as popular science. There is none of the twaddle by which writers try to make science attractive to those unable to appreciate it. To understand the book, only a slight knowledge of anatomy is requisite, but yet there are many facts which may be new to even advanced students. The author begins by asking "What is a frog?" and the book is devoted to answering the question. As soon as we get into the subject, we find many points of interest which had not occurred to us. As the author says: "If the frog was only known by certain fossil remains, it would be considered one of the most anomalous of animals. Many persons are accustomed to make much of the distinctive peculiarities of the human frame. In fact, however, man's bodily structure is far less exceptional in the animal series, is far less peculiar and isolated, than that which is common to frogs and toads." Indeed, we treat the frog with contempt simply from our familiarity with him; were he as rare as the ornithorynchus, we should probably think him almost equally remarkable. Taking the different structures in turn, the author compares them with those of other classes of vertebrates, and points out several curious analogies. He takes the opportunity to make some covert attacks on the doctrine of evolution, of which he is a well-known opponent. It is truly no easy matter to suggest from what animal the frog can have been developed, according to the principle of the "survival of the fittest," and the fossil remains of extinct batrachians do not help us. The "missing link" in the frog's genealogy is less easily imagined than in that of man.

We can recommend the book to our readers as both interesting and instructive.

BOOKS AND PAMPHLETS RECEIVED.

Pharmacographia. A History of the Principal Drugs of Vegetable Origin, met with in Great Britain and British India. By Friedrich A. Flückiger, Professor in University of Strasburg, and Daniel Hanburg, F.R.S. London: Macmillan & Co. 1874. Pp. 704. (From James Campbell, Boston.)

Transactions of the Indiana State Medical Society. Indianapolis. 1874. Pp. 219.

Note sur un Moyen de distinguer la Mort Vraie de la Mort Apparente de l'Homme. Mémoire du Docteur Ange Monteverdi. Crémone. 1874. Pp. 19.

Nature Series. The Common Frog. By W. George Mivart, F.R.S. London: Macmillan & Co. 1874. Pp. 158. (For sale by James Campbell.)

Electricity as a Restorative Agent in Narcosis and Asphyxia. By John J. Caldwell, M.D. 1874. Pp. 8. (From the Virginia Medical Monthly.)

A NEW TONIC—"BOLDO."—Researches have been made by Messrs. Dujardin, Beaumetz, and C. L. Verne on this proposed addition to our list of medicines.

Boldo is a tree found in Chili, of a height of five or six feet, isolated on mountainous regions, with yellow blossom and a verdant foliage. Its bark, leaves and blossoms possess marked aromatic odor, resembling a mixture of turpentine and camphor. The leaves contain largely an essential oil. It contains an alkaloid which is already called "boldine." Its properties are chiefly as a stimulant to digestion and having a marked action on the liver. Its action was discovered rather accidentally, thus:—Some sheep which were liver-diseased were confined in an enclosure which happened to have been recently repaired with boldo twigs. The animals ate the leaves and were observed to recover speedily. Direct observations prove its action; thus, one gramme of the tincture excites appetite, increases the circulation, and produces symptoms of circulatory excitement, and acts on the urine, which gives out the peculiar odor of boldo.—*Medical Press and Circular*.

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Boston Medical and Surgical Journal.

BOSTON: THURSDAY, NOVEMBER 19, 1874.

THE drainage question is a perpetual bugbear to us; we would gladly escape it, but it will not be gainsaid. On the one hand, we have present stench and imminent epidemics, and, on the other, we see enormous inconvenience and expense before relief can be obtained. These latter evils would not be so great were we certain that they would bring relief with them, but the more we consider the subject the more we are oppressed by its magnitude and difficulty. We refer to our own city, but as we fear that in a greater or less degree the trouble is very general, we would call to it the attention of all able to advise, and beg them to give us the benefit of their suggestions. In the meanwhile, we will do well to learn what we can from the experience of others. The Sanitary Commission of the *Lancet* has lately published a report on the drainage of Brighton, a town of considerable importance, and in summer one of the most frequented of English watering places. It appears to be a general rule that any town which for a few months in the year is called upon to provide for a great addition to its normal number of inhabitants is liable to suffer from sanitary troubles. The case of Brighton is in one respect different from that of most places, namely, that in great bathing resorts there are special objections to any plan of drainage which would pollute the water in the neighborhood.

In 1862, twelve years ago, attention was called to the bad state of affairs by the *Lancet*. Three-fourths of the houses drained into cess-pools without outlets, the stench was terrible, the well-water much affected and the sea in front made unclean by the sewage of the town. After much discussion, a sewer was carried some five or six hundred yards out to sea in front of the town. Though the improvement was marked it was far from adequate, and, in 1868, the *Lancet* again took up the matter, and after further discussion more radical measures were resorted to. There is now a great sewer running to a point seven miles distant, which carries the sewage of Brighton and other towns out to sea. The diameter is five feet at the beginning and seven feet at the outlet. The expense was one hundred and fifty thousand pounds sterling, or three quarters of a million of dollars. The town certainly is entitled to great credit for the grand scale on which the work has been done, but, unfortunately, it appears that, after all, there is still much to be desired. The fall of this sewer is but twenty-one feet in its whole length, and this cannot be sufficient to keep it clean, particular-

ly in dry seasons, while its capacity is not sufficient in heavy storms, and old outfalls must still be used. Many, if not all, of the ventilators in the course of the sewer appear to be carried but a short distance above the ground, so that the emanations from them are very perceptible. Worst of all, the smells in the town itself are by no means abolished. Their origin is not clear, but the general opinion seems to be that they come from the remains of the previous accumulations, and if this is so they do not detract from the merits of the present system, but it is not certain that the continued use of closed cess-pools is not to some extent accountable for them.

It is greatly to be regretted that so much money should have been expended without a better result, and we call particular attention to the case as showing how many points must be taken into account in such an undertaking. We are not yet prepared to prescribe any treatment for our own disorders, but, as we are sure that great expense will be inevitable, we would have every point carefully considered before anything is done, so that we may have the full value of our money. Let us be but sure of this, and no outlay will be considered too great.

THE BEEF-TEA FALLACY. By A. MACKINNON, M.D., Stratford, Ont.—Many years ago, that greatest of chemists, Baron Liebig, proposed extract of meat as an agent of value in certain cases of extreme nervous and physical exhaustion. This proposition at once sent the medical world agog, and ever since it has been the custom, with practitioners generally, to prescribe extract of beef in all cases requiring a supporting treatment, and in not a few requiring no such treatment, in the full belief that the article in question was the most concentrated, and at the same time the most easily appropriated and life-giving aliment that the patient could have administered to him. The belief is general that extract of beef is the very quintessence of beef, and, as a matter of course, infinitely more nutritious than beef itself. Such being the opinions entertained, we need feel no surprise at the wide-spread custom of feeding the sick with beef-tea or extract of beef, to the exclusion, to a large extent, of other articles of diet, including beef itself. That this practice is almost universal I need not stop here to show, since the fact must be known to the most casual observer. Physicians, generally, are in the constant habit of ordering extract of beef as food, in all conditions, from enfeebled health to the most acute disease. If the patient is weak, he is at once ordered beef-tea; and if he is still sinking, he is ordered a still larger portion of beef-tea. Such is the practice, as we daily witness it, and such is the practice as seen in all civilized countries, and such will be the practice until many thousand lives more are added to those already sacrificed at the shrine of this stupendous delusion.

What would be thought of the physician who, when called to the bedside, ordered coffee for diet, and more coffee as the patient's strength failed. Of course he would be declared mad; but, as I shall endeavor to show, he is only a trifle more so than the man whose reliance is on extract of beef.

To the intelligent comprehension of the question, it will be necessary to briefly inquire into three points:—

1st. What tissue or tissues of the human fabric more immediately concern the performance of the functions and the continuance of life?

2d. What kind of food is best adapted to the production and support of such tissue?

3d. Does extract of beef contain such food in due, or any, proportion?

As to the first question, all science teaches us that fibrous tissue largely predominates in the higher order of animals, more especially in man. It is contained in bones, tendons and ligaments; nerves and bloodvessels are mainly composed of it; the connecting and various lining membranes are almost purely fibrous; and, lastly, the great muscular system is made up of bundles of fibres, including the heart itself, which is to the animal what the main-spring is to the watch. To enlarge here, would sound too much like demonstrating a self-evident proposition. It is only necessary to add, that every one must be impressed with the important part which fibrous tissue plays in the animal economy, and the paramount necessity of promoting its development and supplying its waste.

The second question is equally easy of solution, since science happily confirms what the experience of ages points out as the most nutritious kind of aliment. In this department of investigation, chemistry has opened up a wide field, the importance of which, to the intelligent physician, is daily becoming more and more apparent. No argument need here be advanced to show that it is from *nitrogenous* substances that muscle and the other fibrous tissues are developed, and the strength of the body maintained, since both observation and science have long ago placed these facts beyond the domain of dispute. *Non-nitrogenous* substances, therefore, do not directly impart strength or vitality to the system, although useful enough as auxiliaries. It is also admitted on all hands that next to milk and raw eggs, or eggs heated to a point short of coagulation of the albumen, the flesh of animals is the most easily assimilated of all food, being already elaborated, and requiring but little change before entering upon its final destination. If to this we add concentration of nutritive power, we can readily see why meat of all kinds, and beef in particular, should be esteemed invaluable as an article of food. It is on these theories that the extensive use of beef-tea and extract of beef is based.

I now come to the consideration of the question, whether the extract of beef contains the *azotized* or *nitrogenous* elements of beef. According to the foregoing conclusions—and I have taken nothing for granted—unless it can be shown to be nitrogenous in its ultimate elements, it cannot nourish the system nor impart direct strength to it. By this test, extract of meat must stand or fall. There is not one law for extract of meat, and another law for all other substances. The law is the same in all cases, and scrupulously impartial. At the beginning, I stated that Baron Liebig was the first to recommend the use of the extract of beef. It would appear, however, that he never recommended its *abuse*, for we find that a short time before his death he publicly repudiated ever having stated that extract of beef was food capable of sustaining life. A synopsis of the paper in which the veteran chemist vindicated his opinions, is given by the *London Medical Record* of April 16, 1873, and affords highly important evidence on a question on which he was, perhaps, better qualified to speak than any one else.

He wishes it to be distinctly understood that "he never asserted that beef-tea and extract of meat contained substances necessary for the formation of albumen in the blood or muscular tissue;" and "that, by the addition of extract of meat to our food, we neither economize carbon for the maintenance of the temperature, nor nitrogen for the sustenance of the organs of our body; and that, therefore, it cannot be called 'food in the ordinary sense,' but we thereby increase the working capabilities of the body, and its capacity to resist exterior injurious influences, i. e. to maintain health under unfavorable circumstances." The editor of *The Record* summarizes the remaining contents of the paper as follows: "Those constituents of meat which are *soluble* in boiling water take no part in the formation and renovation of the muscular tissues, but by their effect on the nerves they exercise a most decided influence on the muscular work, wherein meat differs from all other animal and vegetable food. He (Liebig) therefore places extract of meat (essence), and with it tea and coffee, under the head of 'nervous food,' in contradistinction to articles of 'common food,' which serve for the preserva-

tion of the temperature and the restoration of the machine. Beef-tea and extract of meat are of themselves incapable of supporting nutrition or maintaining life. Liebig, however, with justice, condemns the conclusions of those who, from comparative experiments on the nutritive value of fresh meat and meat-extract, taken *per se*, argue that the latter is not only useless for the purposes of nutrition, but positively injurious. It should be clearly understood that beef-tea and extract of meat are only to be regarded in the light of auxiliaries to food, rather than independent articles of nutriment."

From this, it appears "that by the addition of extract of meat to our food we neither economize carbon for the maintenance of the temperature, nor nitrogen for the sustenance of the organs of our body," that it cannot be called "food in the ordinary sense," and, hence, is placed side by side with "tea and coffee," under the general name of "nervous food." This is pretty hard on those who believe that extract of beef is beef "simmered down," or the quintessence of beef, and who place the utmost confidence in its nutritive and life-sustaining properties.

Science and common sense are here in perfect accord. No one ever dreams that the juices contain all, or any considerable part, of the nutriment of fruit. No one imagines that the brown liquid poured off his dinner potatoes carries with it the nutritious elements of that valuable vegetable, or that he would derive any benefit from using potato-tea. No one seems to think that his apple dumpling has deteriorated in the boiling, or that apple-dumpling tea contains all the nutriment that apple dumpling is capable of imparting. "Those constituents of meat which are soluble in boiling water take no part in the renovation and formation of muscular tissue." This quotation from Liebig's paper contains a lesson worth remembering, since it is as applicable to most other articles of food as it is to meat.

From this, it is evident the less artificial our food the better, whether in health or disease. Of late years, it has been too much the fashion to run after artificial preparations, such as extract of meat, concentrated milk, infant's food, chemical food, and the like. I have no hesitation in saying that such preparations are not only wholly unnecessary, but absolutely injurious under the ordinary circumstances of life. I grant some of them may be of use for purposes of travel, or under other conditions, placing the simpler and more natural articles of food beyond reach. To this I would make exception in favor of extract of meat, for, although it is not food in the ordinary sense, yet it may be given with advantage in cases of extreme nervous and physical exhaustion.

A few years ago, every invalid was recommended to transform himself into a carnivorous animal. Copious instructions were given for the preparation of the meat, and confident promises of restoration to health were freely made. Civilized people, however, have always had an aversion to raw meat, and the practice, I believe, has not become very general. Raw meat is prepared for use by first beating it into a pulp. Lately, I have been in the habit of directing this pulp to be cooked, simply by adding boiling water to it and agitating the whole briskly. It may be made of any consistency to suit the individual taste, and savored according to the same rule. It may be allowed to infuse a few minutes, as thereby it is rendered more palatable to most persons. In cases of very feeble digestive power, a few drops of muriatic acid, well diluted, taken immediately after each meal, will greatly aid its digestion. This preparation is well suited to all cases where no hunger is experienced and mastication is irksome, or where food is loathed, and the digestive powers are feeble—in fact, in all such cases, as it has been the custom of late years to administer the imaginary food called beef-tea or extract of meat. I find that patients prefer the beef pulp, prepared as I direct, to the extract, while, in point of nutrition, no comparison can be drawn between them. I would only add that it is quite possible to place too much reliance on beef and brandy in cases of extreme nervous and physical exhaustion. New milk and fresh raw eggs are equally important, and there can be no reasonable doubt, that a due admixture of these and other articles,

judiciously administered, is the surest and speediest method of restoring to nature her exhausted strength.—*Canada Lancet.*

THE SCIENCE OF DISINFECTION.—Dr. John Dougall (Glasgow) read an interesting paper on this subject in the Health Section at the Social Science Congress at Glasgow. The author first alluded to the confusing diversity of opinion among scientific men on disinfection and disinfectants. Something less uncertain was required than mere conceptions formed or adduced from the property of impending or neutralizing putrefaction, or nullifying or masking the smell. Though the ultimate changes produced by putrefaction and fermentation were apparently the same, yet the phenomena of the two processes were as distinct as the symptoms of any two diseases or pathological lesions. This point constituted the foundation of scientific disinfection. A portion of fresh beef infusion grew putrid in twenty-four hours, and at the end of twelve months was still swarming with animalcules, cloudy and fetid. Putrefying bodies yield very various offensive effluvia, according to their constitution and the surrounding medium. Putrefaction is characterized by the presence of myriads of animalcules, fetor, haziness, neutral, alkaline, or faint acid reaction, and slowness of change. Fermentation consists of the presence of torulæ, mycelia and other cryptogams, mouldy aroma, transparency of fluid, acid reaction, and rapidity of change. Fresh organic matter, which if left alone would putrefy, could be made to ferment by adding to it a portion of a mineral acid. Also, if some acid be added to a putrid fluid, putrescence is arrested and fermentation induced; or, if added in larger quantity, putrescence is arrested and fermentation prevented, while the fluid, instead of being fetid, actually becomes slightly fragrant. The result is the same when slight excess of acid is mixed with fresh or fermenting organic fluids, but no pleasant odor is produced. Judging from the manifestations of putrefaction and fermentation, it is obvious that the latter is harmless compared with the former; while their æsthetics are as different as their influence on health. Putrid matter evolving noxious effluvia for nearly twelve months must be more hurtful than fermenting matter almost odorless and fully decomposed in about four months. By the addition of a small proportion of acid to effete nitrogenous substances, fermentation may be substituted for putrescence, or both arrested, or both prevented. The torulæ and other fungi thus artificially induced are no more hurtful than those that grow in cheese, milk, fruits, &c., and are swallowed with impunity. By the proper application of these principles, typhoid fever and diphtheria, which are considered by many to arise *de novo* from putrid matter, might be prevented, and other zymotic diseases greatly diminished. The prevention of decomposition in organic substances by acids is preferable to causing fermentation, but fermentation is again better than antiseption; because, if antiseption be practised on offending matter containing zymotic poison, the poison is preserved as well as the matter, and thus antiseption is seen to be an admirable contrivance for maintaining a constant supply of zymotic germs for originating future epidemics. The use of a pure antiseptic, such as carbolic acid, as an antizymotic, is a palpable paradox, preservation being practised and destruction expected. There are no valid grounds, either on logic or fact, to assume, as is constantly but apparently unconsciously done, that, because carbolic acid arrests or prevents putrefaction, it therefore annihilates zymotic poison. Carbolic acid, in every way and with every advantage, totally fails to affect vaccine lymph; while sulphurous, nitric, acetic and hydrochloric vapor, chlorine, also potash, incorporated with the lymph, render it inert. All true science harmonizes; hence this fact might be inferred from the action of a pure antiseptic and of the stronger acids on organic matter. It was lately stated in American medical journals, that so signal was the failure of carbolic acid as a preventive of yellow fever in New Orleans and Mobile, that suspicion was awakened that its effects were positively injurious, and that it

helped to spread the disease. Dr. Dougall expressed his preference for chlorine, hydrochloric and sulphurous acids as antizymotics, and disapproved of using ferrous sulphate for infectious excreta, as it was merely a deodorizer. He gave a summary of the action of acids and alkalies on fresh, putrid and fermenting matter, and on vaccine lymph; also a classification, by Dr. Letheby, of the apparent *modus operandi* of disinfecting agents. In conclusion, he said two points were worthy of reiteration: 1. Putrefaction of organic matter may be impeded, arrested or neutralized, or the odor neutralized or masked, and yet any zymotic poison present in all probability be unaffected, preserved, or only made dormant for a short time. 2. The mineral acids are true disinfectants; they prevent putrefaction; they arrest putrefaction; they transform putrefaction into fermentation; they deodorize; and, what is most important, they are highly antizymotic as regards vaccinia, and therefore, *a priori*, of other contagia and infecta.—*British Medical Journal*.

SEWAGE GRASS AND SEWAGE MILK.—The *Medical Times and Gazette*, Oct. 31, 1874, contains an account of some observations made by Mr. Hutchinson Smee on the above subject. It will be recollected that at the time of the outbreak of typhoid fever in Marylebone, during the course of last year, the hypothesis was advanced that, inasmuch as the milk of the suspected dairy was in part produced from a sewage farm, we must seek from this fact the real cause of the outbreak. Experience did not support this view, but it was a matter of much importance to know how far and in what respect sewage grass differs from ordinary meadow grass as food for milk-giving cows. Mr. Smee "made an infusion from the tops of grass grown on the sewage farm, and also from a similar weight of grass from a neighboring meadow. The two samples of grass yielded

	Sewage farm grass per gallon.	Meadow grass per gallon.
Nitrogen, as ammoniacal salts,	8.4	2.8
Nitrogen, as ammoniacal organic matter,	1.4	.7
Nitrogen, as albuminoid ammonia,	12.6	5.6
	<u>22.4</u>	<u>9.1</u>

"From this analysis, it appears that sewage grass contains a large quantity of unassimilated nitrogenized matter, and it is not improbable that part, at least, of the albuminoid ammonia is sewage pure and simple, locked up in the cells and juices of the plants.

"The difference between the two sets of figures is truly astonishing, but perhaps the most astonishing is the difference between the albuminoid ammonia—that is to say, the albuminous substances probably partially converted into part and parcel of the plant."

Cows of a similar breed and milking qualities were set aside for the purpose of these inquiries, but it was found impossible to obtain a very satisfactory standard.

Mr. Smee states that "cows which he had fed exclusively on sewage grass have lost flesh and have done badly, even when they have been fed on a mixed diet, substituting only sewage for meadow grass. The following is the analysis of two shorthorn cows, which, before the experiments, were equal in quantity and quality of milk:—

	Water.	Solids.	Casein.	Fat.
Sewage fed,	86.3	13.7	2.5	2.5
Ordinary fed,	86.2	13.8	3.2	3.0

"The cream from these cows was set aside, and the time required for churning into butter was:—

Sewage, 2½ hours;	1½ hours;	butter soft, 2½ hours.
Ordinary, 35 minutes;	1½ "	butter firm, ½ hour.

"Pats of butter were set aside and kept until they went bad; it was invariably found that the sewage butter became rancid many days before butter made from meadow grass did so. More curiously still, however, it was found that 'sewage milk, when placed on one of Graham's dialysers, on several occasions, but not invariably, behaved in a remarkable manner. The casein appeared to separate from the milk, and streamed through the membrane, and fell to the bottom of the vessel containing water. The casein evidently existed in the milk in some allotropic condition. The phenomenon was never noticed in other milks.'

"The results are certainly very interesting and very curious, but, as Mr. Smee himself says, it is by such investigations, long and carefully conducted, that in the end the truth must be sought."

SCARLATINAL WAVES.—*The British Medical Journal* of October 17, 1874, in an editorial on this subject, states that the scarlatinal wave for a year is nearly always at its lowest point in spring, and at its highest, late in autumn, usually in the months of April and November. This may be called the annual wave, and varies but little in its course, whether the disease be epidemic or not. An examination of the deaths in the metropolis (London), recorded during thirty-two years, shows that the *lowest* point in each year was reached, on fifteen occasions, between the tenth and fifteenth weeks, and in nine others between the fifteenth and twentieth weeks; that the *highest* point in each year was reached, on sixteen occasions, between the fortieth and forty-fifth weeks, and on thirteen between the forty-fifth and fiftieth weeks. The total mortality in the thirty-two years, during the five weeks which are included between the beginning of the eleventh and the end of the fifteenth week, amounted to 5,204 deaths, whilst during five weeks which are included between the beginning of the fortieth and the end of the forty-fourth week in the same year, the deaths amounted to no less than 12,172.

Another wave, which may be called the *periodic*, may be represented by a line connecting together the mortality from the disease in each year, and indicates the years in which it is epidemic or non-epidemic. An examination of the mortality in each of the thirty-four years ending Dec. 31, 1873, shows that the disease was epidemic in 1840, 1844, 1848, 1852, 1854, 1858-59, 1862-64 and 1868-70; whilst the smallest mortality occurred in 1841, 1846, 1851, 1857, 1861, 1867 and 1873. It is, therefore, evident that the curve of the descending is much more gradual than that of the ascending wave, as the epidemic takes a longer time to subside than to rise again. The almost uniform recurrence of the disease as an epidemic, after three years of comparatively small mortality, is very noticeable in the figures just quoted.

What are the causes of this periodical increase in the height of the scarlatinal wave? Does it arise from seasonal influences, or other causes at present unknown? To this we can only reply, at present, that the careful comparisons made by Dr. Tripe in 1848, and by Dr. Richardson some years afterwards, show that a temperature below 44.6° Fahr. corresponds with the spread of scarlet fever, whilst a temperature above that point is coincident with an increase in the mortality; also, that the greatest mortality in the year occurs when the temperature ranges between 49.6° and 56.9°, but that the movement in the mortality does not occur in the same ratio with the increase in the temperature. This latter conclusion might have been expected from the comparative regularity with which the disease assumes an epidemic form every four years, whilst there are not, so far as we know, any corresponding sequences in any of the atmospheric phenomena. There is one important consideration respecting scarlatina, as well as smallpox and other eruptive diseases which occur ordinarily only once in a person's life, which must not be forgotten, viz., that in the interval between one epidemic and another a number of children are born who are susceptible to the disease from not having had it, and that the epidemic may chiefly take its origin

by the disease occurring in localities where there are many children unprotected, and thus spread rapidly to persons in the immediate vicinity. This can hardly explain its periodicity, although it accounts for the greater number of cases when the outbreak occurs.

KLEIN ON THE ANATOMICAL CHANGES IN TYPHOID FEVER (*Medical Times and Gazette*, Oct. 24, 1874).—Dr. Klein, of the Brown Institution, has lately made some interesting observations on the above subject. Sections of the hardened ileum of typhoid patients show, according to him, that an active absorption of peculiar organisms goes on in the mucous membrane of, and especially around, the Peyer's patches. These organisms are carried thence into the lymph-canals and the vessels of the mucous membrane.

In the earliest case which he examined, where death had occurred on the seventh day after the first appearance of headache, the crypts of Lieberkühn were found to contain peculiar greenish-brown spheroidal corpuscles of very variable size, the largest twice or three times as big as a human red blood-corpuscle, the small ones only half or a quarter as large. When the bodies lie closely grouped together, as is generally the case, they appear of a dark olive-green color; and the corpuscles at the edge of such masses, or where they are completely isolated, exhibit transitional forms, due to incomplete subdivision. Similar corpuscles are found in the tissue of the mucous membrane, where they appear to be contained in the lymphoid cells of the adenoid tissue. The minute veins, and also some of the lymphatic vessels, contain large numbers of them, and in the former they subdivide rapidly, so as to form greenish-yellow granular micrococci, arranged in groups of two or four, as well as in rings and other figures. The micrococci have their origin in a mycelium whose filaments are branched and apparently smooth, and of a greenish-yellow color. These organisms occur not only in the neighborhood of Peyer's patches, which are moderately swollen, but also in parts of the mucous membrane which to the naked eye show no alteration except slight general swelling, although, microscopically, the follicles of the patches in one case were found to have undergone the following changes:—The central part of the follicle, especially where it lies in the submucous tissue, was converted into a spongy substance by the formation of spaces around its bloodvessels, their wall consisting of the adenoid tissue with which the latter are sheathed. The lymphoid cells of this tissue were converted into large granular bodies containing two to five or even more nuclei, which greatly resembled the nuclei of endothelial cells. In several of the follicles true giant cells were seen.

In a later stage (twelfth day), the mucous membrane itself showed somewhat similar changes, and the multinuclear lymphoid cells were found in its venules and in those of the submucous tissue, as well as in the lymphatics of the latter. Dr. Klein is unable at present to give a decided opinion whether the above alterations are directly dependent on the presence of the micrococci, or whether they must be considered as secondary to changes in the vascular system. The passage of micrococci inwards from the free surface of the intestine can be traced through the epithelium into the substance of the mucous membrane, and especially towards the crypts of Lieberkühn; and this occurs in parts which are some distance from the swollen Peyer's patches, and which appear nearly or quite unaltered to the naked eye.

It is said that Tanner's *Practice* has had the greatest success of any medical publication in England for many years. Several editions of five thousand copies each have been sold.—*Medical and Surgical Reporter*.

The Hospitals.

MASSACHUSETTS GENERAL HOSPITAL.

REPORT OF OPERATIONS.

Service of Drs. Bigelow and Cabot. Saturday, November 7, 1874.

1. Fatty Tumor of Thigh.
2. Large Erectile Tumor of Cheek and Neck.
3. Benign Parotid Tumor.
4. Sarcoma of Superior Maxilla.
5. Chronic Mammary Tumor of Breast.
6. Abscess of Knee.
7. Fatty Tumor of Arm.
8. Foreign Body in Hand.
9. Hydrocele.
10. Fistula in Ano.
11. Necrosis of Inferior Maxilla.
12. Fistula in Ano.

1. The case of fatty tumor removed by Dr. Bigelow offered points of interest. Of the size and form of a goose-egg, it was situated in the outer part of Scarpa's triangle, prominent, firm and adherent to the muscles. It was a little movable from side to side, but not at all so in the axis of the limb. From its upper part, a firm band, supposed to be the sartorius muscle, united the tumor to the anterior superior spinous process of the ilium. Its circumference was rounded, without lobes, while the whole mass was singularly hard and unyielding. Under these circumstances, and in view of its locality, a frequent seat of malignant tumor, and considering the age of the patient, a gentleman of sixty, Dr. Bigelow entertained little doubt of its sarcomatous and locally malignant character. He advised its removal only as giving the patient an additional chance. The tumor, said to have been growing only a year, and to have followed a fall, had been examined by distinguished surgeons, who had, on the above evidence, advised against surgical interference. It proved to be an inter-muscular, egg-shaped fatty tumor, without lobes, and presenting to the touch an almost cartilaginous hardness. The band supposed to be the sartorius muscle proved to be fibrous.

2. An enormous erectile tumor of cheek and neck, in a baby four months old, was of congenital origin, had doubled in size within two months, and was nearly oblong in shape. It measured six inches in its longest axis, and projected three inches from the surface. Its inferior portion occupied the whole sub-maxillary triangle, involving the lobe of the ear, while the mass extended upward nearly to the malar bone. It did not pulsate, but, when squeezed, was rapidly again distended. The surface of the tumor presented a number of spots having the usual appearance of naevi. Dr. Bigelow, remarking that he feared to break the skin, transfixed the base of the mass with two mattress needles passed at right angles. The growth was then strangulated in four sections, by stout ligatures carried from the projecting needles across the top and around its base. The mass sloughed off on the 11th inst., leaving a large wound. The baby seemed doing well.

4. The sarcoma of the upper jaw presented the usual appearance of a malignant tumor of the antrum. The patient was an elderly female, who insisted on some attempt to relieve by operation her excessive pain in that region. With no hope of curing the disease, Dr. Bigelow divided and raised the cheek, and excavated from the antrum the malignant mass, which proved to be a round-cell sarcoma.

6. A young woman had entered the house with a large abscess, involving the whole anterior surface of the knee-joint, including its outer and inner aspects. Prominent and painful, the swelling had existed about a month, without known cause or antecedent tumor. The absence of constitutional symp-

toms and the freedom with which the joint itself could be moved and handled, indicated a probably extra-articular lesion, a diagnosis which a free incision verified.

H. H. A. BEACH, M.D.,
Surgeon to Out-patients.

Bibliographical Notices.

THE Hospital Sunday fund in London amounted to £4,000. It cost £1,100 to collect it.

THE autumn manœuvres of the troops at Versailles have been followed by a severe epidemic of typhoid fever among the soldiers.

THE last number of the *Nashville Journal of Medicine and Surgery* triumphantly refutes the base charge brought against it of "highfalutin rowdyism."

MR. WM. A. BLANCHARD, of the former firm of Lea & Blanchard and Blanchard & Lea, well-known publishers of medical works in Philadelphia, has recently died in that city.

ADULTERATED TEAS.—It was stated at a recent meeting of the City Commissioners of Sewers, that there were millions of pounds of spurious tea in the wharves and warehouses of the city of London, some of which had been accumulating for thirty or forty years. The attention of the sanitary authorities was directed to the fact.—*British Medical Journal*.

DR. J. HUGGINS, of Alabama, contradicts the generally received statement that club-foot, hare-lip and other congenital malformations are rarer in the negro than in the white man. He thinks the reverse is the case, and adds that the negroes in the larger cities are far better specimens of the *genus homo* than their country cousins.

MR. BRIGHT, being invited to be present at a conference of anti-vaccinators, declined to take any part in it, and gave his opinion that the facts were against the anti-vaccinators. He, however, expressed his doubts as to the wisdom of compulsory vaccination, and he "felt that the law which inflicts any penalty on a parent who is unwilling to have his child vaccinated is monstrous."

MEDICAL DEPARTMENT OF DARTMOUTH COLLEGE.—The graduating exercises were held Nov. 4th. Degrees were conferred on twenty-three students. Six of these gentlemen were from Maine, five from New Hampshire, Vermont and Massachusetts each and two from New York. The class consisted of twenty-eight. We regret not to have been informed how many candidates for degrees were unsuccessful.

DEATH FROM SMOKING.—The case is reported in France of a young man who perished in attempting to smoke twelve cigars for a wager. At the eighth cigar he began to feel uncomfortable, at the ninth he had chills and dizziness, which became more severe with the tenth. He still refused to stop smoking, but consented to go home with two of his friends. He was then attacked with vomiting and pain in the abdomen, and, in spite of professional assistance, he died in the night. It should be stated that the heart was hypertrophied.

THE CARRIER PIGEON.—The travelling pigeon never feeds. If the distance be long, it flies on without stopping to take nutriment, and at last arrives thin, exhausted, almost dying. If corn be presented to it, it refuses, contenting itself with drinking a little water and then sleeping. Two hours later, it begins to eat with great moderation, and sleeps again immediately afterwards. If its flight has been very prolonged, the pigeon will proceed in this manner for forty-eight hours before recovering its normal mode of feeding.—*Union Medicale; Medical Times and Gazette*.

UNPROFESSIONAL CONDUCT.—We received, some time since, an article from a well-known practitioner in this State, who is still a member of the Massachusetts Medical Society; but before its turn for publication came we noticed the name of the author over a paper in an eclectic medical journal. Whatever doubts we then felt as to our duty to reject the article were shortly dispelled by seeing in another irregular journal the very case which we still have in our drawer.

BENZINE IN SEBORRHOEA.—Mr. Canty, of Liverpool, in his late work on "Cutaneous Medicine," recommends as the best solvent for sebum, benzole, either pure or as a lotion. "If," he says, "there are collections in the convolutions of the ear where instruments can only be inconveniently used, pure benzine, applied with a brush, will readily dissolve the sebum, leaving the central black spot quite intact, as a pillar of dirt and hairs in a cavity. If used on the face, back or shoulders, some camphorated oil being added to ten times the quantity of almond oil, the mixture should be rubbed into the skin at night. In the morning, the benzole lotion should be applied with a sponge or flannel, and afterwards the parts well washed with warm water and soap." He gives the following formula:—

R. Benzole,	℥ss.
Gum tragacanth,	℥ss.
Water,	℥viii.

—*Medical and Surgical Reporter; New Remedies.*

NOTES AND QUERIES.

Is it true that any man (*Medical Times and Gazette*, p. 4-9) can practise medicine in England, even without State authorization? There are some regulations and restrictions surely. We had supposed the law to be very stringent in these matters. Who can tell us, far at this distance the whole matter there seems to be in a muddle? **DIPLOMA.**

ANTHELMINTICS.—"Dr. White said . . . as a practical point, it was very extraordinary how a tape worm, after resisting almost every kind of treatment, would finally be killed by a dose of something."—*Last number of this Journal*, p. 475.

Query—Did it never occur to anthelmintologists that a tapeworm is a mortal creature, and that, when by reason of age or other infirmity its time of departure is at hand, it may be killed by almost anything that greatly disturbs the alimentary canal of its "host"? **KEPHALEPEP.**

DIED.—In New Bedford, Mass., October 9th, of membranous croup, John Bradford, aged 5 years and 3 months, youngest son, and, October 27th, of diphtheria, George Henry, aged 12 years and 11 months, eldest son, of Dr. John H. and Alice W. Mackie.

MORTALITY IN MASSACHUSETTS.—Deaths in sixteen Cities and Towns for the week ending November 7, 1874.

Boston, 129; Worcester, 15; Lowell, 21; Chelsea, 7; Cambridge, 20; Salem, 9; Lawrence, 8; Springfield, 15; Lynn, 13; Gloucester, 10; Fitchburg, 2; Taunton, 5; Newburyport, 3; Somerville, 13; Fall River, 13; Holyoke, 8. Total, 289.

Prevalent Diseases.—Consumption, 34; pneumonia, 25; typhoid fever, 14; scarlet fever, 12; cholera infantum, 11; diphtheria, 7; croup, 7.

CHAS. F. FOLSOM, M.D.
Secretary of the State Board of Health.

DEATHS IN BOSTON for the week ending Saturday, Nov. 14, 143. Males, 74; females, 69. Accident, 3; asthma, 1; anæmia, 1; inflammation of the bowels, 3; disease of the bowels, 1; bronchitis, 6; inflammation of the brain, 3; congestion of the brain, 2; disease of the brain, 3; cyanosis, 1; cancer, 2; cholera infantum, 2; consumption, 28; convulsions, 2; croup, 2; debility, 3; diarrhoea, 2; dropsy of the brain, 2; diphtheria, 1; exhaustion, 1; scarlet fever, 4; typhoid fever, 4; gastritis, 1; disease of the heart, 9; disease of the hip, 1; disease of the kidneys, 1; disease of the liver, 2; congestion of the lungs, 3; inflammation of the lungs, 16; marasmus, 7; measles, 2; old age, 9; paralysis, 1; pleurisy, 1; premature birth, 2; peritonitis, 1; puerperal disease, 1; rheumatism, 1; ulcer of the stomach, 1; tabes mesenterica, 3; teething, 3; unknown, 1.

Under 5 years of age, 54; between 5 and 20 years, 11; between 20 and 40 years, 24; between 40 and 60 years, 23; over 60 years, 23. Born in the United States, 100; Ireland 28; other places, 15.